

STAT

Copied to:

OGI

OEA

Route to:

C/NIC

VC/NIC

NIO/AL - Hans

NIC/AG - Sid

EXECUTIVE SECRETARIAT

Routing Slip

TO:		ACTION	INFO	DATE	INITIAL
1	DCI				
2	DDCI				
3	EXDIR				
4	D/ICS				
5	DDI				
6	DDA				
7	DDO				
8	DDS&T				
9	Chm/NIC				
10	GC				
11	IG				
12	Compt				
13	D/EEO				
14	D/Pers				
15	D/OEA				
16	C/PAD/OEA				
17	SA/IA				
18	AO/DCI				
19	C/IPD/OIS				
20	NIO/ECON		✓		
21					
22					
SUSPENSE		Date			

Remarks:

[Handwritten signature]

D/ Executive Secretary
27/83
 Date

STAT

THE WHITE HOUSE
WASHINGTON

Executive Registry

83-0792

CABINET AFFAIRS STAFFING MEMORANDUM

DATE: 2-7-83 NUMBER: 077775CA DUE BY:

SUBJECT: Cabinet Council on Economic Affairs - February 8, 1983

8:45 a.m. in the Roosevelt Room.

	ACTION	FYI		ACTION	FYI
ALL CABINET MEMBERS	<input type="checkbox"/>	<input type="checkbox"/>	Baker	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Vice President	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Deaver	<input type="checkbox"/>	<input type="checkbox"/>
State	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Clark	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Treasury	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Darman (For WH Staffing)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Defense	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Harper	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Attorney General	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Jenkins	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Interior	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Agriculture	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Commerce	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Labor	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
HHS	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
HUD	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Transportation	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Energy	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Education	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Counsellor	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
OMB	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
CIA	<input type="checkbox"/>	<input checked="" type="checkbox"/>	CCCT/Gunn	<input type="checkbox"/>	<input type="checkbox"/>
UN	<input type="checkbox"/>	<input type="checkbox"/>	CCEA/Porter	<input checked="" type="checkbox"/>	<input type="checkbox"/>
USTR	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CCFA/Boggs	<input type="checkbox"/>	<input type="checkbox"/>
CEA	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CCHR/Carleson	<input type="checkbox"/>	<input type="checkbox"/>
CEQ	<input type="checkbox"/>	<input type="checkbox"/>	CCLP/Uhlmann	<input type="checkbox"/>	<input type="checkbox"/>
OSTP	<input type="checkbox"/>	<input type="checkbox"/>	CCMA/Bledsoe	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	CCNRE/Boggs	<input type="checkbox"/>	<input type="checkbox"/>

REMARKS: As previously announced, the Cabinet Council on Economic Affairs will meet Tuesday, February 8, 1983 at 8:45 a.m. in the Roosevelt Room. An additional paper on Financial Market Developments, CM # 111, is attached.

RETURN TO: ☐ Craig L. Fuller
Assistant to the President
for Cabinet Affairs
456-2823

☒ Becky Norton Dunlop
Director, Office of
Cabinet Affairs
456-2800

DCI
EXEC
REG



EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

MEMORANDUM FOR CABINET COUNCIL ON ECONOMIC AFFAIRS

February 6, 1983

FROM: Lawrence A. Kudlow

LAK

SUBJECT: Financial Market Update -- Focus on Monetary Policy

Summary

- I. Financial markets in recent months have generally consolidated the gains achieved during the third quarter, but of late some disquieting signs have appeared.
- II. The growth of reserve and monetary aggregates shifted into high gear over the past 7 months, reversing the restrictive path established during the first half of 1982.
- III. Early explanations for the rapid rise in money growth emphasized special factors such as unusual increases in the demand for money, maturing All Savers Certificates and other changes in bank deposit rules. But the most recent evidence does not corroborate these views.
- IV. Moving away from the special factors approach, the large M1 increase can be amply explained by the traditional balance sheet/reserve supply/money creation framework of analysis.
- V. A set of monetary rules-of-thumb illustrate that monetary changes exert a significant influence on economic and financial developments.
- VI. But money is not all that matters, and recent experience strongly suggests that a sound monetary policy requires a strong fiscal backbone.

- I. Financial markets in recent months have been relatively stable, consolidating the gains of the third quarter. But of late some disquieting signs have begun to emerge.
- 1) Interest rates during the past few months have generally held around the lower levels established during the late summer and fall, providing considerable stimulus to prospects for economic recovery in 1983.

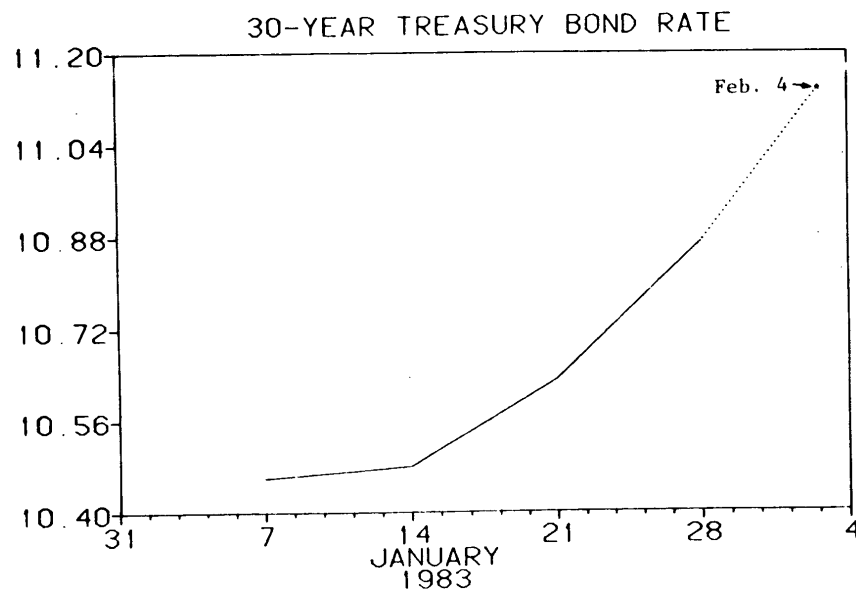
Selected Interest Rates

	<u>3-month T-bill</u>	<u>Prime Rate</u>	<u>Fed Funds Rate</u>	<u>30-year T-bond</u>	<u>Mortgage Rate (FHLMC)</u>
Feb 12	14.1	16.5	15.2	14.7	17.6
Jun 25	12.9	16.5	14.2	14.2	16.7
Aug 27	7.5	13.5	9.0	12.3	15.9
Sep 24	7.5	13.5	10.3	11.9	15.2
Oct 29	7.9	12.0	9.4	11.2	14.2
Nov 26	7.9	11.5	8.9	10.5	13.8
Dec 31	8.0	11.5	8.8	10.4	13.6

2) Numerous factors were responsible for the broad-based interest rate decline in 1982.

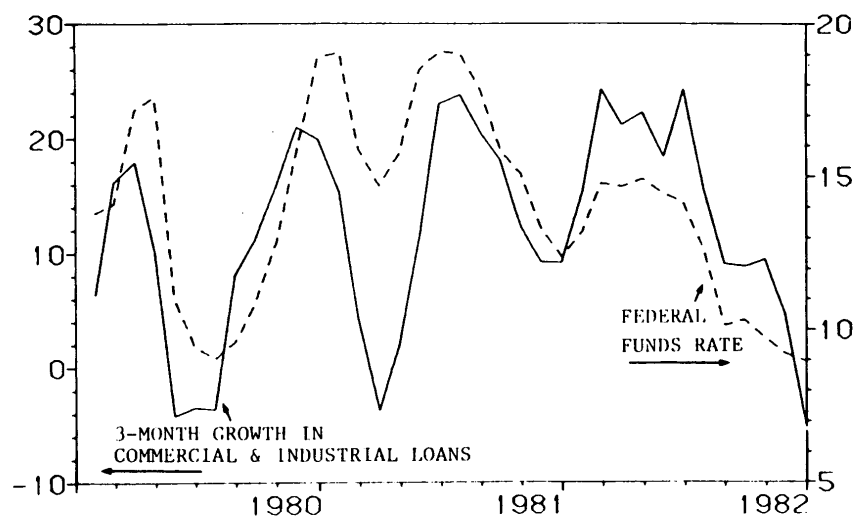
- o Continuous reduction of inflation pressures dropped the 12-month growth of the CPI from nearly 9% a year ago to under 4% by yearend.
- o A successful budget reconciliation package last summer, associated with moderate monetary growth trends at the time, helped to crack stubborn inflation expectations. Reduced inflation premiums were an important influence in the major break in long rates; government bond yields dropped from 14% in early 1982 to about 10 1/2% late in the year.
- o Short-term credit demand fell sharply during the year, imparting a much easier tone to financial market conditions in both the short and the long end of the maturity spectrum. Measured over 13-week intervals, business loan growth was running at a 20% rate last February and finished the year with only a 1% rate. Nonfinancial commercial paper was declining at a 57% rate by yearend.
- o Monetary policy took a steadily more accommodative turn, as the 13-week growth of non-borrowed reserves shifted from 6% in mid-year to 18% by yearend, a major injection of high-powered liquidity. With the collapse of private credit demands, this reliquification of the banking system generated substantially easier money market conditions.

- 3) During the past 4 or 5 weeks, however, short rates have stopped declining and long-term interest rates have started to edge higher.
- o The 3-month T-bill rate has settled around 8%, while commercial paper and CD rates have moved up to 8 1/2%.
 - o Long-term government bond prices have sold off by 5 to 7 points, and yields have moved from below 10 1/2% to above 11%. Bond market conditions have become particularly unsettled during the past 2 weeks.



- 4) One possible explanation for the rise in bond yields is the end to declining inflation and inflation expectations. With recovery now in sight, many market participants are fearful that fiscal and monetary policy will put upward pressure on interest rates and inflation. Similarly, dormant credit demand may revive after many months of monetary reliquification. And credit demand is a key ingredient in the movement of interest rates.

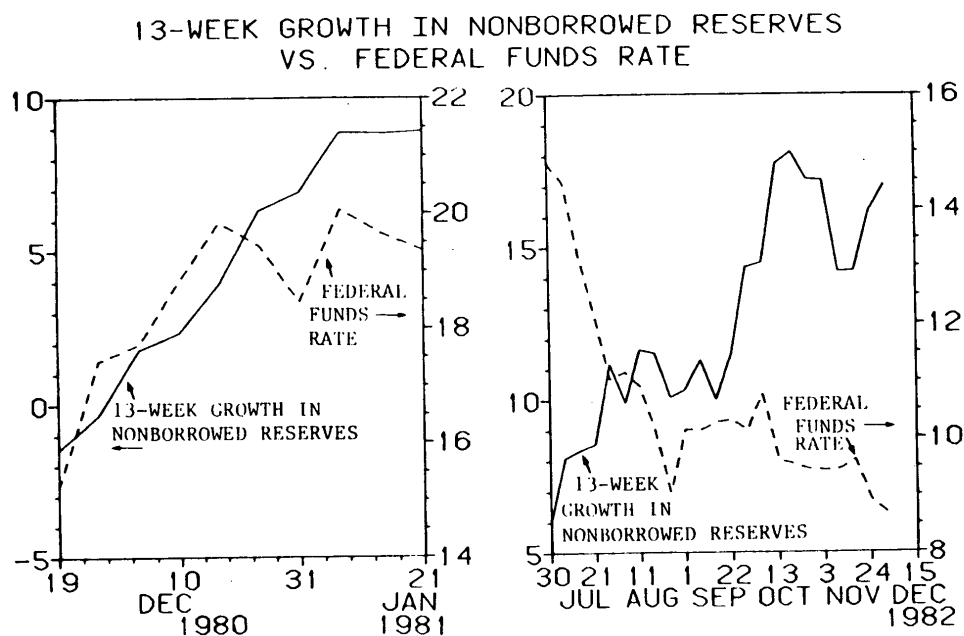
3-MONTH GROWTH IN COMMERCIAL AND INDUSTRIAL LOANS
VS. FEDERAL FUNDS RATE



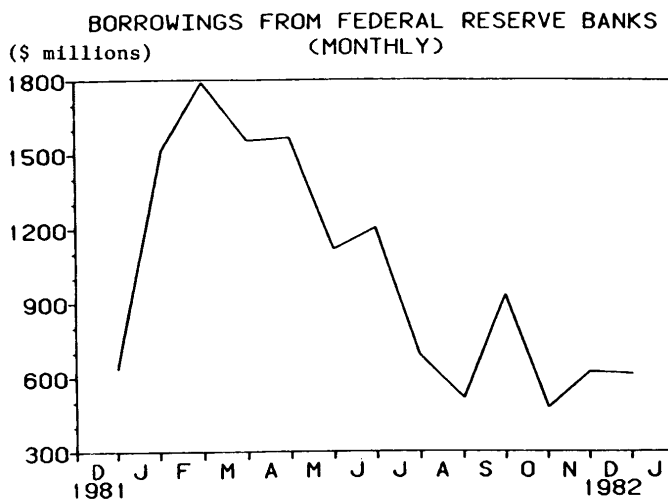
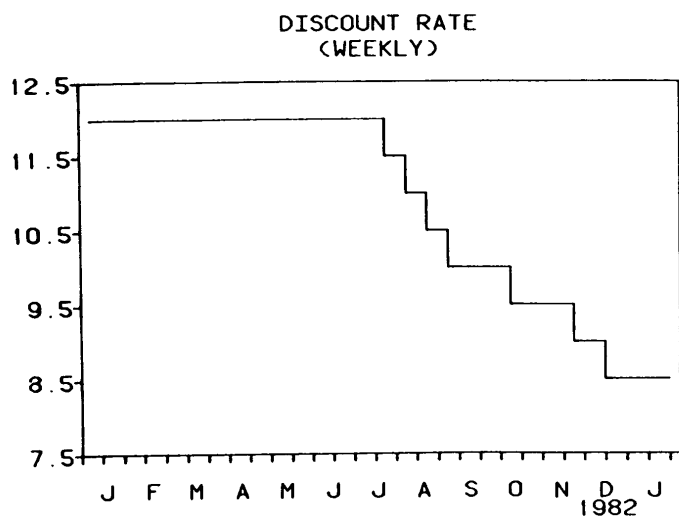
- 5) Another significant source of credit demand stems from the Federal sector, where Treasury net market borrowing requirements are projected to continue at record levels. Some market participants point to current and prospective borrowing requirements as an important reason for the recent rise of interest rates.

<u>Treasury Net Market Borrowing</u>			
	<u>October - December</u>	<u>January - March</u>	<u>April - June</u>
FY 1983	59.2	59.5(e)	33.0 - 38.0(e)
FY 1982	<u>37.7</u>	<u>33.2</u>	<u>11.7</u>
Difference	21.5	26.3(e)	21.3 - 26.3(e)

- 6) Artificially generated liquidity is not always the answer to strong credit demand; there are limits to the expansion of high-powered bank reserves. As the following charts suggest, if economic activity and credit demand are falling, such as in 1982, then nonborrowed injections can take rates down. But if business conditions and credit demands are rising, such as in late 1980 and early 1981, then nonborrowed reserve injections can have the perverse effect of driving rates higher.



- 7) The Federal Reserve discount rate on loans to member banks was reduced 7 times in 1982, from 12% in June to 8 1/2% in mid-December. It should be noted that after the last discount rate reduction market interest rates did not decline. Even the central bank has no magic wand when it comes to lowering market rates.



- o With weakening private credit demands, and a close relationship between the levels of the discount rate and the Federal funds rate, member bank borrowing declined over the year from \$1.8 billion to around \$600 million by yearend.

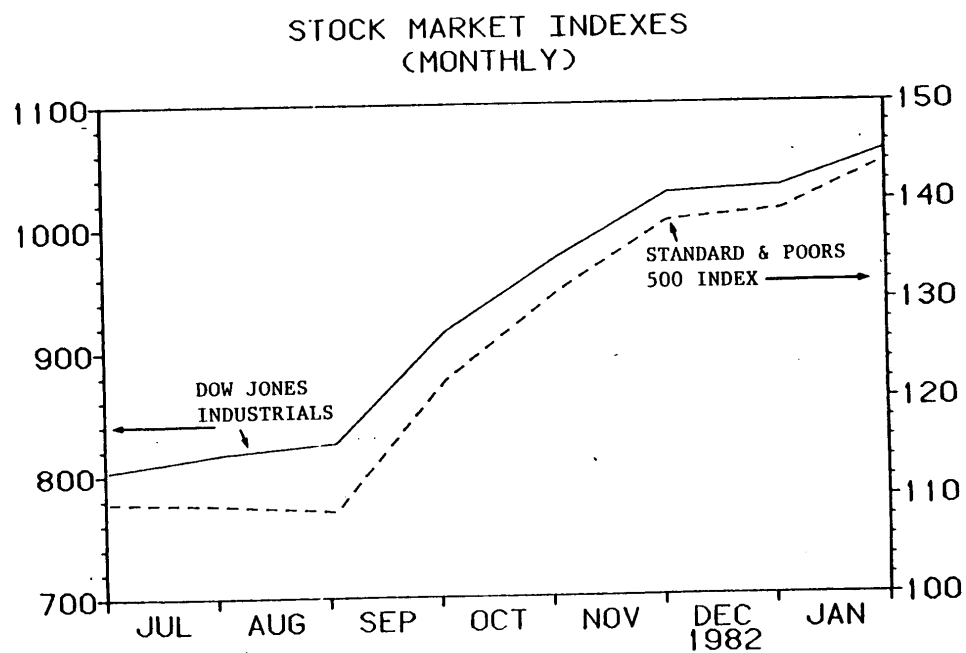
- 8) There are numerous signs that the process of disinflation is now ending. Raw materials prices firmed in January. Prices of materials such as lumber and plywood, helped by the upturn in housing, have been rising for some months. Demand for gold and silver have increased amid new concerns that large deficits and pressures on monetary policy may reignite inflation. .

<u>Commodities</u>							
		Gold	Silver	Copper	Raw Materials	Plywood	Lumber
		<u>(\$/oz)</u>	<u>(\$/oz)</u>	<u>(\$/lb)</u>	<u>(1967=100)</u>	<u>(\$/thous. sq. ft.)</u>	<u>(\$/thous. bd. ft.)</u>
1982:	Jun	311.62	5.39	67.9	233.2	168.4	149.0
	Jul	338.87	6.49	69.6	236.5	165.8	140.8
	Aug	365.16	7.14	70.1	236.4	169.5	134.5
	Sep	433.00	8.68	69.7	239.1	173.6	134.0
	Oct	416.84	9.21	69.5	235.4	186.0	139.0
	Nov	416.45	9.79	70.1	230.2	194.0	156.3
	Dec	445.31	10.61	70.9	227.2	192.4	169.4
1983:	Jan	480.00	12.45	77.2	231.4	208.3	186.5

- 9) Starting in November, the dollar also began to weaken against other currencies. The trade-weighted average fell by 5.3% between November and January. The decline has been 11.9% against the yen, and 6.5% against the D-mark.

<u>Dollar Performance</u>			
	<u>Trade-Weighted Index</u> <u>(March 1973 = 100)</u>	<u>Yen/\$</u>	<u>DM/\$</u>
1982: Jun	116.97	251.20	2.429
Jul	118.91	255.03	2.466
Aug	119.63	259.04	2.481
Sep	120.93	263.29	2.506
Oct	123.16	271.61	2.532
Nov	124.27	264.09	2.554
Dec	119.27	241.94	2.419
1983: Jan	117.73	232.73	2.389
% Change from Nov 1982 to Jan 1983	-5.3	-11.9	-6.5

- 10) As usual, the stock market has been a good predictor of future economic activity and corporate profits. But the stock market advance has slowed in recent weeks.



II. Monetary and reserve trends shifted from restraint to stimulus during 1982, and for the year as a whole the growth of M1 was substantially higher than 1981.

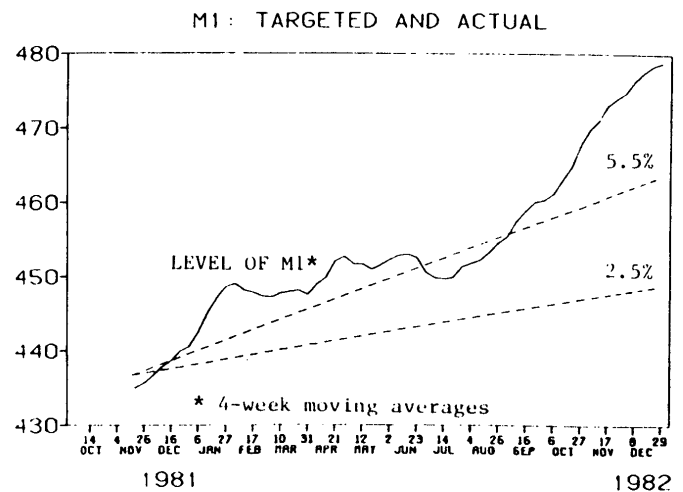
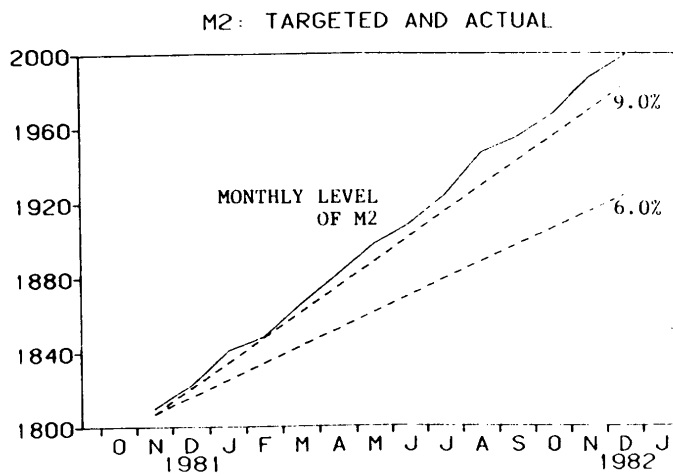
- 1) The broader M2 aggregate has not displayed any significant change in trends during the past few years, but M1 growth until 1982 had been on a declining path.

	<u>M1 Growth (4th/4th)</u>	<u>M2 Growth (4th/4th)</u>
1977	8.2	11.4
1978	8.2	8.2
1979	7.4	8.4
1980	7.3	9.2
Average 1977-1980	7.8	9.3
1981	5.0	9.5
1982	8.5	9.9

- 2) 1982 can be divided into 1st half and 2nd half comparisons.

	<u>Monetary Indicators (SAAR)</u>			
	<u>Nonborrowed Reserves</u>	<u>Total Reserves</u>	<u>M1</u>	<u>M2</u>
Dec 1981 - Jun 1982	0.1	3.1	4.8	9.6
Jun 1982 - Dec 1982	16.1	12.4	12.4	10.0

3) For the entire year, the levels of M1 and M2 exceeded their target ranges.

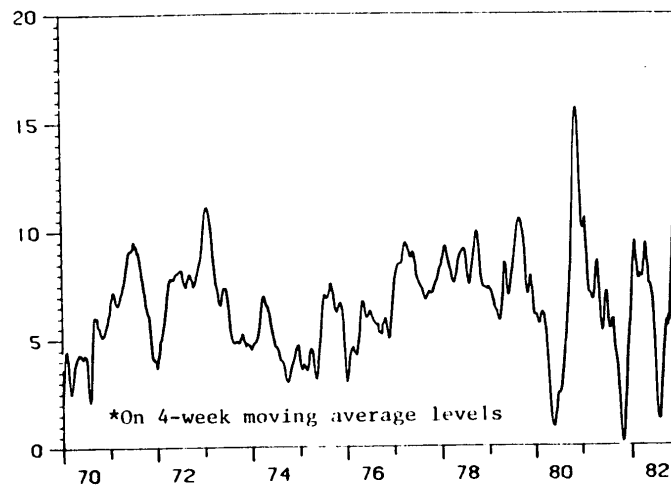


- 4) The pattern of quarterly money and velocity growth has been unusually volatile during the past 2 years.

	Quarterly Growth (SAAR)	
	M1	V1
1981:1	4.6	14.3
2	9.6	-3.9
3	0.2	11.1
4	5.8	-2.7
1982:1	10.8	-10.7
2	3.3	3.4
3	3.5	2.1
4	17.1	-13.1

- 5) Measured over 26-week intervals (4 weeks to 4 weeks), during the 1970-82 period, the recent M1 rise ranks 2nd only to the Carter expansion of 1980.

26-WEEK GROWTH IN M1 *



6) Statistical tests suggest that the rising M1 growth pattern has not yet runs its course.

- o Since it generally takes time for changes in the supply of bank reserves to be fully reflected in money growth, the continuation of the rapid growth of nonborrowed reserves through Q4/82 provides an advance signal of future M1 growth.
 - This signal suggests that M1 growth will remain strong during the current quarter, with M1 growth projected to rise at an 11% annualized rate, following the 17.1% rate of the previous quarter.
 - From Q2/82 through Q1/83, this estimate places M1 growth at a very strong 10.3% pace. From a base of Q4/81, the projection puts M1 growth at 9.0%. And, from Q4/80, this estimate generates an 8-quarter growth rate of 7.2%.
- o These projections are derived from a statistical model that relates M1 growth over any 3-month period to the 3-month growth in nonborrowed reserves measured 2 months earlier. For example, growth in M1 in the 3 months ended in January is related to the growth in nonborrowed reserves for the 3 months ended in November.

For quarterly average data the specific statistical relationship is:

$$\% \text{ ch M1} = 2.8 + 0.52 (\% \text{ ch NBR})$$

- o This means that in Q1/83 the annualized percent change in M1 will equal 2.8 percentage points plus roughly one-half (0.52) of the average growth in nonborrowed reserves over the October 1982 - January 1983 period. It is this model that generates the 11% M1 growth projection for this quarter.

III. Some early explanations for the rapid rise of money growth emphasized a number of structural and regulatory factors such as maturing All Savers Certificates (ASC's), unusual increases in the demand for money, and the advent of new bank deposit rules. However, the available evidence suggests that these factors have played only a limited role in the rate of monetary expansion.

- 1) It was first suggested that maturing All Savers Certificates (ASC's) would at least temporarily cause a sharp jump in M1 balances. It was asserted that depositors would reinvest these funds, causing M1 figures to be inflated.
 - o But the M1-nonborrowed reserve analysis described earlier provides a means of determining how much of the late-1982 money bulge can be explained by traditional reserve supply actions and how much is attributable to special factors, such as ASC's.
 - Based on this analysis the actual level of M1 in Q4/82 (\$474.0 billion) exceeded the model's prediction (\$471.1 billion) by only \$2.9 billion.
 - This implies that most (84%) of the \$18.3 billion increase in M1 in Q4/82 can be explained by the generous provision of bank reserves and only a small residual (16%) can be attributed to ASC's and other special factors.
 - o Viewing the \$2.9 billion figure as a distortion to the M1 data, and subtracting it from the Q4/82 level, yields a "corrected" growth in M1 for the Q4/81 - Q4/82 period of 7.9%, which is only slightly below the 8.5% actual growth.

- 2) Another suggested explanation for the large increase in money growth asserts that the decline in interest rates caused an increase in the demand for money.
- o While this is true to some extent, statistical analysis using a number of empirically estimated money-demand functions indicates that over the Q4/81 - Q4/82 period an increase in M1 of 5.5% would have fully accommodated the increase in money demand.
 - o One of the most widely used money-demand functions, which is very similar to those employed by the Fed, was originally estimated by former CEA member Stephen Goldfeld in a study commissioned by the Brookings Institution ("The Demand for Money Revisited", Brookings Papers in Economic Activity, 1973:3).
 - As recently reestimated by the CBO, this function projects an M1 increase of \$24.2 billion (5.5%) over Q4/81 to Q4/82. This is substantially less than the actual increase of \$37.3 billion (8.5%) and also considerably below the "corrected" increase of \$34.4 billion (7.9%).
 - Thus, the recent monetary surge cannot be explained by the effects of the late-1982 interest rate decline on the demand for money; a much smaller increase would have fully accommodated this increase in demand.
 - o Future declines in interest rates will lead to further increases in money demand. But the monetary accommodation needed to meet these changes tends to be rather small.
 - If the rate on 3-month Treasury bills was to decline today from roughly 8% to 6%, and remain there for the rest of the year, the effect would be to increase the growth in money demand over the full year by 1.4%.
 - Therefore moderate money growth will be sufficient to finance further interest rate reduction and economic recovery.

- 3) A third view of the over-target rise in 1982 money growth does not assert that it was principally generated by special factors, but that the large increase was necessary to accommodate an unusually steep decline in velocity. This velocity decline presumably represents a large increase in money demand born of the public's desire to accumulate "precautionary" balances during a period of unusual uncertainty.
- o However, velocity typically declines during recessionary periods, and these declines are always offset by large velocity increases during recovery periods.

Velocity Growth
(4 quarters before and after cycle troughs)

<u>Trough</u>	<u>Before Trough</u>	<u>After Trough</u>	<u>Velocity Acceleration During Recoveries</u>
Q2/54	-2.7	5.3	8.0
Q2/58	-0.9	6.4	7.3
Q1/61	-1.0	5.9	6.9
Q4/70	-0.0	2.7	2.7
Q1/75	2.8	6.9	4.1
Q3/80	<u>2.0</u>	<u>6.0</u>	<u>4.0</u>
Average	0.0	5.5	5.5
Q4/82	-4.3	NA	NA

- o The 4.3% decline in velocity in 1982 is unusually large, more than likely a reflection of the unusually long and severe recession. Reversing the worst cumulative inflation in U.S. history, the duration and amplitude of the 1981-82 recession was considerably worse than projected by virtually all government and non-government forecasts.

- o But many studies show that velocity growth was unusually strong during the 1971-1980 period, reflecting the record inflation spiral, and the resultant drop in the demand for cash balances. (No one desires to hold money or money assets when rising inflation erodes purchasing power.)
 - o Therefore, the unusual drop in velocity in 1982 may simply be an offset to the unusual rise during the prior period.
 - o As the above table indicates, velocity growth can be expected to snap back during the recovery period ahead, and the demand for money can be expected to decline. Over time, the history of these relationships during the postwar period has been relatively stable.
- 4) The most recent available data suggest that M1 was slightly distorted by the maturing All Savers Certificates, but this temporary disturbance has run its course. But M2 has experienced much larger distortions from the advent of new bank deposit accounts, and until these distortions shake out M2 will not be a reliable policy guide over the near term.
 - o As stated in the most recent Federal Reserve staff analysis, "On balance, it does not appear that M1 growth was greatly influenced by the introduction of Money Market Deposit Accounts (MMDA's) and Super Now accounts."
 - o But the level of M2 has been distorted by a \$200 billion surge of MMDA's during January. Preliminary estimates suggest a 30% annual rate of M2 increase for the month.

IV. Moving away from the "special factors" analysis, the large M1 increase experienced in 1982 can be amply explained by the traditional balance sheet/reserve supply/money creation framework of analysis. When viewed in this manner, the monetary developments of 1982 are not at all surprising.

1) Balance sheet to balance sheet

Like any banker or corporate treasurer, the senior executives of the Federal Reserve possess the knowledge and the authority to control the assets and liabilities of their own balance sheet. In turn, the balance sheet controlled by the central bank is the dominant influence on the aggregate balance sheet of the nation's commercial banking system.

- o Changes in the Federal Reserve balance sheet lead directly to changes in the commercial bank balance sheet.
- o With a system of fractional reserve requirements, changes in central bank assets and liabilities create multiplicative changes in commercial bank footings.
- o The liability side of the commercial bank balance sheet is composed primarily of various forms of bank deposits.
- o Along with currency in circulation, these deposits are aggregated into various categories known as the "money supply."
- o Without the resources provided by the central bank, there can be no significant expansion by commercial banks. Or the "money supply."

- 2) First, a summary of the consolidated statement of condition of the U.S. monetary authorities, using data for year-end 1981, mid-year 1982, and year-end 1982.

Consolidated Federal Reserve Statement

<u>Federal Reserve Assets</u>				<u>Federal Reserve Liabilities</u>			
	<u>12/30/81</u>	<u>6/30/82</u>	<u>12/29/82</u>		<u>12/30/81</u>	<u>6/30/82</u>	<u>12/29/82</u>
1) Gold and Special Drawing Rights	<u>14,469</u>	<u>14,967</u>	<u>15,566</u>	1) Federal Reserve Notes	132,647	134,228	143,263
2) Discount Window (Advances)	883	1,735	691	2) Deposits			
3) Total Securities (U.S. Government Agencies and Acceptances)	<u>141,679</u>	<u>136,007</u>	<u>148,327</u>	Reserves of depository institutions	28,729	20,295	26,839
4) Federal Reserve Credit (Total Loans & Securities)	142,562	137,742	149,018	U.S. Treasury	3,402	4,099	3,620
5) Float	10,996	9,603	11,567	Foreign -- official	319	586	261
6) Bank Premises and Other Assets	<u>9,843</u>	<u>9,228</u>	<u>10,386</u>	3) Other Liabilities and capital	<u>12,773</u>	<u>12,332</u>	<u>12,554</u>
7) Total Assets	<u>177,870</u>	<u>171,540</u>	<u>186,537</u>	4) Total Liabilities	<u>177,870</u>	<u>171,540</u>	<u>186,537</u>

- o The asset side of the Fed's balance sheet has been divided into 6 major components while the liability side has 3 major components. Of course, assets must equal liabilities.
- o As the data indicate, central bank policy was quite restrictive during the period from December 30, 1981 to June 30, 1982, then policy shifted toward expansion during the second half of 1982. Assets declined by nearly 4% during the first half, then increased by nearly 9% during the second half of the year.
- o The key asset component is Federal Reserve credit, the sum of security investments and discounted loans. This composes 80% of total assets. Through the purchase and sale of government securities, and the administration of the discount window, the authorities exercise direct control over the provision of Fed credit, sometimes called high-powered money.
 - Gold and SDR's compose about 8% of Fed assets, but this category changes infrequently.
 - Bank premises and other assets change very little.
 - Float bounces around, but rarely outside 5 to 7% of total assets.
- o Since gold, SDR's, bank premises and other assets change little over time, the authorities directly control 93% to 95% of total Federal Reserve assets -- only float is beyond direct control.
- o Asset changes equal liability changes, and the key lever on the liability side is the deposit component.
 - Total deposits declined by 23% during the first half, then increased by 23% during the second half.
 - Federal Reserve notes (currency), which also qualify as reserves, are supplied on demand if banks prefer to hold their reserves as currency rather than a deposit at the Fed.
 - Increases in notes are offset by reductions in reserve deposits; it is a Fed liability adjustment, with no reserve policy impact by itself.

3) Second, the balance sheet of commercial banks.

Reflecting the shifts of the Fed's balance sheet, commercial banks experienced unusually slow 1.8% growth during the first half of the year, and a substantial 8.3% expansion during the latter half. In the important demand deposit category, the level declined by 4.8% from December to June, then increased by 6.2% during the June - December period.

Aggregate Commercial Bank Balance Sheet

<u>Assets</u>				<u>Liabilities</u>			
	<u>12/30/81</u>	<u>6/30/82</u>	<u>12/29/82</u>		<u>12/30/81</u>	<u>6/30/82</u>	<u>12/29/82</u>
1) Cash	99,219	89,138	102,663	1) Demand Deposits	187,518	178,515	189,553
2) Total Securities	152,432	151,598	167,422	2) Time & Savings Deposits	362,502	385,108	406,888
3) Loans	455,893	473,564	488,113	3) Other Liabilities & Residual	276,489	277,428	314,084
4) Other	<u>118,965</u>	<u>126,751</u>	<u>152,327</u>				
5) Total Assets	<u>826,509</u>	<u>841,051</u>	<u>910,525</u>	4) Total Liabilities	<u>826,509</u>	<u>841,051</u>	<u>910,525</u>

4) Putting the model together.

The central point is that changes in Federal Reserve credit generate changes in commercial bank credit. There is no magic to the process. Expansion transmits expansion, restraint transmits restraint. Simplifying the balance sheets, the relationship appears like this.

Central Bank		Commercial Bank	
<u>Assets</u>	<u>Liabilities</u>	<u>Assets</u>	<u>Liabilities</u>
Fed Res credit	Reserves	Bank credit	Deposits
-- loans	-- notes	-- loans	
-- securities	-- deposits	-- securities	Other Liabilities
		-- cash	
	Other Liabilities	(reserves)	Capital
	Capital		

- o If the Fed purchases a Treasury bill from a bank, then Fed assets (securities) increase and bank reserves (Fed deposits) increase.
- o The bank then has fewer securities but more reserves.
- o Within the framework of the U.S. fractional reserve banking structure, the bank's new reserve resources can be leveraged into a multiple expansion of new loans and securities and comparable amounts of deposits.
- o People may talk about "pushing on a string," but if banks are given additional resources, they will put them to work. This is how profits are earned. Or losses.

- o The bank deposit categories are aggregated into monetary classifications regulated by the Federal Reserve.

M1	M2	M3
Currency	M1	M2
Traveler's Cheques	Overnight RPs & Eurodollars	Large Time Deposits
Demand Deposits	Money Market Fund Balances	Term RPs
Other Checkable Deposits	Savings & Small Time Deposits	Institutional MMMF Balance

5) Balance sheets vs reserve and monetary aggregates -- there are no surprises.

- o From a balance sheet standpoint, Federal Reserve credit and commercial bank credit were tight during the first half of 1982 and expansive during the second half. Looking at various monetary and reserve policy aggregate growth rates, the story is corroborated.

	Annualized rates of change	
	<u>12/81 - 6/82</u>	<u>6/82 - 12/82</u>
<u>Balance Sheet Measures</u>		
Total Fed Assets (NSA)	-3.6	12.4
Commercial Bank Assets (NSA)	3.0	17.8
<u>Policy Measures</u>		
Total Reserves (SA)	3.1	12.5
Nonborrowed Reserves (SA)	0.1	16.1
M1 (SA)	4.8	12.4
M2 (SA)	9.6	10.0

- o Explanations concerning the monetary impact of demand shifts, precautionary balances, and new deposit rules may be of passing interest, but the true source of monetary stimulus during the past 6 months can be traced to changes in the central bank balance sheet -- over which officials exert direct control.
- o The analysis suggests that the M1 aggregate has behaved in a predictable manner based on balance-sheet induced changes in the supply of bank reserves.
 - The impact of maturing All Savers Certificates was limited, and this temporary disturbance has run its course.
 - As stated in the most recent Federal Reserve staff analysis, "On balance, it does not appear that M1 growth was greatly influenced by the introduction of MMDA's and super NOW's."

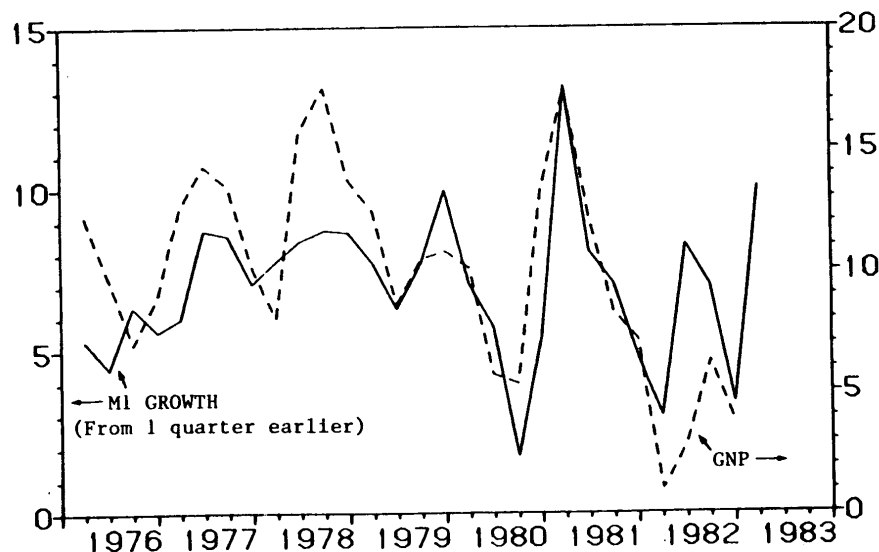
- o The broader M2 aggregate has experienced large distortions resulting from the introduction of the new money market deposit accounts (MMDA's), and preliminary estimates suggest a level of \$200 billion by late January. Early projections suggest a 30% annual rate of increase for January. Until these distortions shake out, M2 will not be a reliable policy guide over the near term.
- o The rapid expansion of bank reserves and M1 may trigger a major reawakening of private credit demands. If private credit demand surges, there will be a lagged effect of upward interest rate pressures. The probability of this outcome is all the greater because of unusually strong Federal government credit demands projected for 1983.

V. If we can identify the factors that determine monetary creation, then perhaps the logical next question is how much does money matter? And the short answer is, money matters a lot. Both academic theory and empirical research have proven over and over the significance of monetary flows on economic and financial activity. This is not the place for an extensive review of the literature. But there is time to review a few rules-of-thumb.

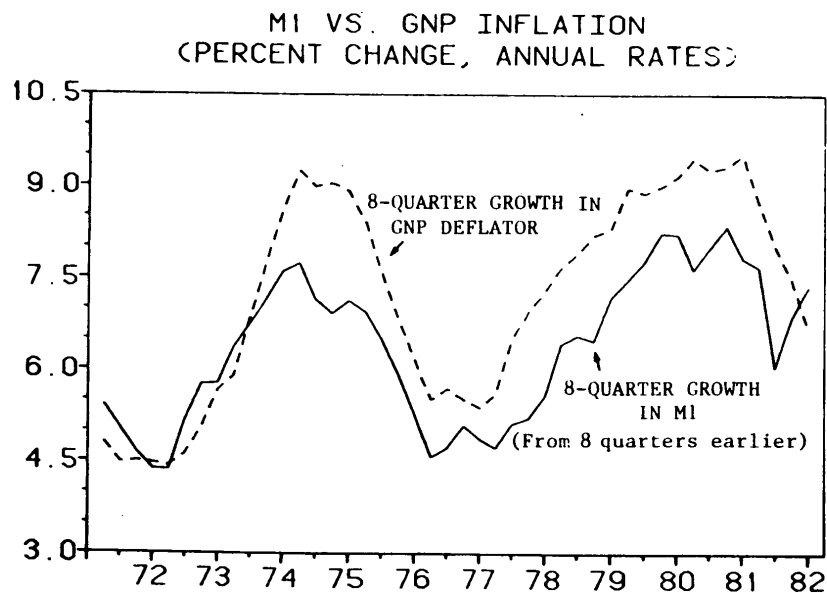
o Changes in the rate of money growth affect the rate of total spending in the economy (nominal GNP) with a lag of 1 to 2 quarters. The lags are variable, but on average in recent years 3 to 6 months appears to be correct.

- In the short run, the shift in nominal GNP growth will generate a similar shift in real GNP growth.
- But over time the monetary change will exert a larger influence on the level of prices, and a smaller influence on the level of output.
- The following chart shows that a strong economic rebound is brewing, if it can be sustained.

MONEY SUPPLY AND NOMINAL GNP
(2-QUARTER GROWTH RATES)

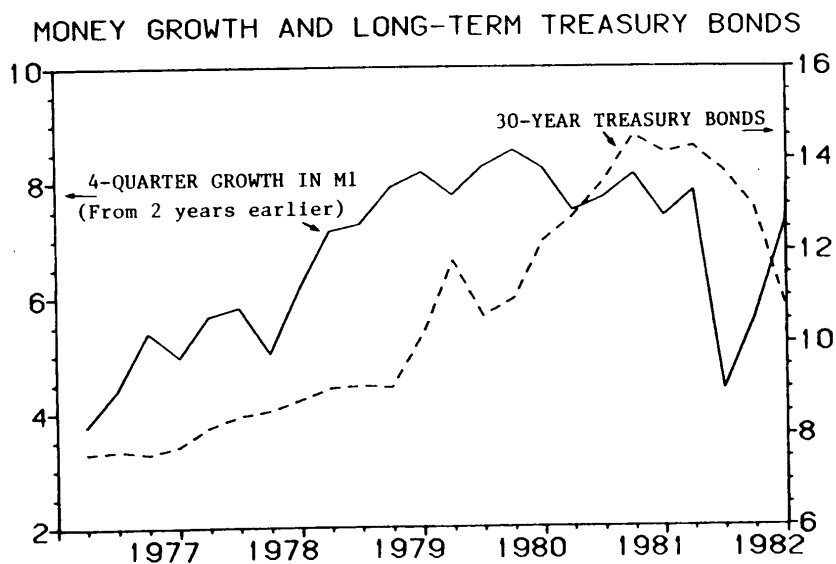


- o Changes in the rate of money growth affect the rate of inflation with a lag of about 2 years. But it is also important to recognize that in recent years this lag has been shortened. It now appears that partial effects on inflation can occur in one year or less, while the full effect may take 2 years or longer.
- Over the past decade the M1 and inflation troughs are moving progressively higher.
- M1 trends during the past year suggest that the current disinflation cycle is ending.



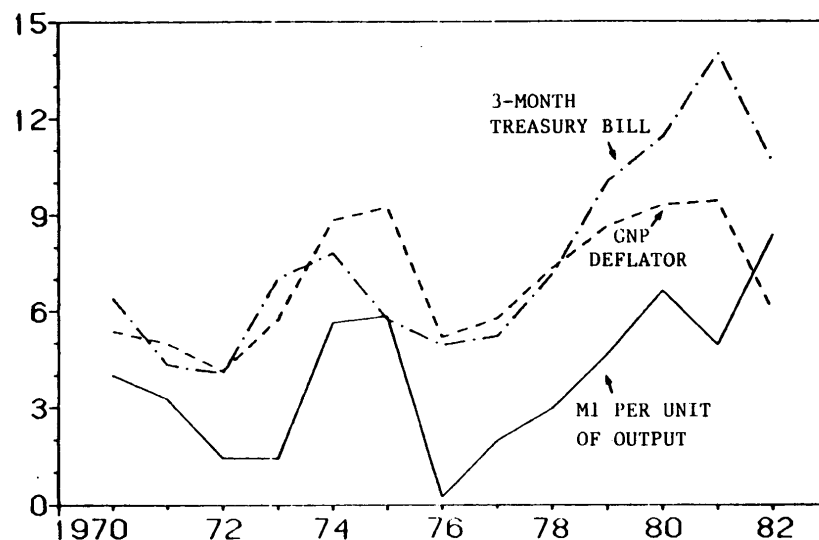
- o Changes in monetary policy impact interest rates, particularly medium and long-term rates. There are a number of important influences on short-term rates, and monetary policy is one of them. But inflation expectations are a major determinant of medium and long-term rates, and monetary policy plays a major role in the formation of these expectations. The lags in this area appear to be getting shorter and shorter; in some cases bond markets react overnight to changes in monetary policy.

- The current data suggest that long-term Treasury bond yields have reached bottom.
- This would be the highest bottom on record.



- o The following chart, which describes monetary, economic and inflation trends, captures the full effects of the monetary influence on economic and financial activity. The base influence is money supply per unit of output. In theory, over the long run, money growth should approximate the trend growth of real output. For the U.S. during the postwar period, this implies long-term money growth of about 3.5% per year. None of these relationships are perfect, but the parallel movements are clear.

GROWTH OF M1 PER UNIT OF OUTPUT, AND INFLATION
VS 3-MONTH TREASURY BILL RATES



VI. But money is not all that matters. In the short run, there may be a hundred non-monetary factors that influence the economy and the credit markets: wars, harvests, labor strikes, bankruptcies, weather, computer failures, fogged-in airports, and who knows what. In recent years, however, there are a number of studies that assert that over the long run a sound monetary policy requires a strong and dependable fiscal backbone.

- o There is substantial academic as well as practical evidence which suggests that large, persistent deficits cannot be financed without inflation. The historical record for this country and numerous others indicates that governments and their central banks are unwilling to tolerate long periods of stagnant growth and high unemployment, outcomes that result from heavy government absorption of private capital and resources. The academic scribblers have finally discovered what the markets have always known: monetary policy is frequently used to stimulate growth in a futile attempt to counter a deficit-ridden fiscal policy that inhibits growth. Some of the recent work:

- J.M. Buchanan and R. Wagner, Democracy in Deficit: The Political Legacy of Lord Keynes, 1977.
- Thomas Sargent and Neil Wallace, "Some Unpleasant Monetarist Arithmetic," 1981.
- M.J. Hamburger and B. Zwick, "Deficits, Money and Inflation," 1981.
- William G. Dewald, "Disentangling Monetary and Fiscal Policy," 1981.
- Mickey D. Levy, "Factors Affecting Monetary Policy in an Era of Inflation," 1981.
- Allan H. Meltzer, "Deficits and Inflation," 1982.
- Roger W. Garrison, "On Deficits and Inflation," 1982.

- o On deficits, money growth and inflation, the scholars have come to recognize that rising deficits lead to faster money growth and accelerating inflation.

	<u>Deficit/GNP</u>	<u>M1 Growth</u>	<u>Inflation</u>
1957-1965	0.8	2.6	1.7
1965-1973	1.1	4.8	4.5
1973-1981	2.5	6.5	8.0

- o On deficits and interest rates, the academics have come to recognize:

	<u>Deficit/GNP</u>	<u>Inflation</u>	<u>3-mo T-bill</u>	<u>Long T-bond</u>
1957-1965	0.8	1.7	3.0	4.0
1965-1973	1.1	4.5	5.4	5.6
1973-1981	2.5	8.0	8.3	8.5

- o As a practical matter, by 1983 most people believe that large deficits will lead to rising inflation, without knowing exactly why. ("The process engages all the hidden forces of economic law, on the side of destruction, and does it in a manner which not one man in a million is able to diagnose."-- J.M. Keynes.) But the missing link is monetary policy.

- o A fiscal policy characterized by persistently large deficits is sure to generate a number of adverse effects.
 - Increased rate of growth of the Federal sector
 - Slowdown in the rate of private capital formation
 - Unduly high real and nominal interest rates
 - Below-trend growth in the production of output and above-trend unemployment rates
 - Large trade deficits and exchange rate volatility
- o But political pressures always emerge to "do something" about slow growth, high unemployment and lofty interest rates.
 - "Doing something" frequently means pressure on the central bank to "get interest rates down."
 - These pressures insure a continuation of the deficit creation/debt monetization/inflationary sequence that has become commonplace in the U.S. and elsewhere.
- o As a result of this sequence, the business and financial communities, and the general public, have come to use fiscal policy and deficit projections as leading indicators of future inflation and interest rates. Some would argue that fiscal decisions have become the leading edge of inflation expectations.

- o As a percentage of GNP, the 1984 Budget projects the following path of deficits:

<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>6-year Average</u>
7.0	5.8	5.4	3.8	3.4	2.6	4.7

- o The direction of these measures is correct, but the levels are very high. From a fiscal standpoint, it will be a difficult period for the conduct of monetary policy.